



CCCACGCGTCCGCAGCTTCCCGAGGCTCCGCACCAGCCGCGCTTCTGTCCGCC
TGCAGGGCATTCCAGAAAGATGAGGATATTTGCTGTCTTTATATTCATGACCT
ACTGGCATTGCTGAACGCATTTACTGTCACGGTTCCTCAAGGACCTATATGTG
GTAGAGTATGGTAGCAATATGACAATTGAATGCAAATTCCCAGTAGAAAAAC
AATTAGACCTGGCTGCACTAATTGTCTATTGGGAAATGGAGGATAAGAACAT
TATTCAATTTGTGCATGGAGAGGAAGACCTGAAGGTTTACGCATAGTAGCTAC
AGACAGAGGGCCCGGCTGTTGAAGGACCAGCTCTCCCTGGGAAATGCTGCAC
TTCAGATCACAGATGTGAAATTGCAGGATGCAGGGGTGTACCGCTGCATGAT
CAGCTATGGTGGTGCCGACTACAAGCGAATTACTGTGAAAGTCAATGCCCCA
TACAACAAAATCAACCAAGAATTTTGGTTGTGGATCCAGTCACCTCTGAAC
ATGAACTGACATGTCAGGCTGAGGGCTACCCCAAGGCCGAAGTCATCTGGAC
AAGCAGTGACCATCAAGTCCTGAGTGGTAAGACCACCACCACCAATTCCAAG
AGAGAGGAGAAGCTTTTCAATGTGACCAGCACACTGAGAATCAACACAACA
ACTAATGAGATTTTCTACTGCACTTTTAGGAGATTAGATCCTGAGGAAAACCA
TACAGCTGAATTGGTCATCCAGAACTACCTCTGGCACATCCTCCAAATGAA
AGGACTCACTTGGTAATTCTGGGAGCCATCTTATTATGCCTTGGTGTAGCACT
GACATTCATCTTCCGTTTAAAGAAAAGGGAGAATGATGGATGTGAAAAAATGT
GGCATCCAAGATACAACTCAAAGAAGCAAAGTGATACACATTTGGAGGAG
ACGTAATCCAGCATTGGAACCTTCTGATCTTCAAGCAGGGATTCTCAACCTGTG
GTTTAGGGGTTTCATCGGGGCTGAGCGTGACAAGAGGAAGGAATGGACCCGTG
GGATGCAGGCAATGTGGGACTTAAAAGGCCCAAGCACTGAAAATGGAACCT
GGCGAAAGCAGAGGAGGAGAATGAAGAAAGATGGAGTCAAACAGGGAGCC
TGGAGGGAGACCTTGATACTTTCAAATGCCTGAGGGGCTCATCGACGCCTGT
GACAGGGAGAAAGGATACTTCTGAACAAGGAGCCTCCAAGCAAATCATCCAT
TGCTCATCCTAGGAAGACGGGTTGAGAATCCCTAATTTGAGGGTCAGTTCCTG
CAGAAGTGCCCTTTGCCTCCACTCAATGCCTCAATTTCTTTTCTGCATGACTG
AGAGTCTCAGTGTTGGAACGGGACAGTATTTATGTATGAGTTTTCTCTATTTA
TTTTGAGTCTGTGAGGTCTTCTTGTGATGTGAGTGTGGTTGTGAATGATTTCTT
TTGAAGATATATTGTAGTAGATGTTACAATTTTGTGCGCCAACTAACTTGCT
GCTTAATGATTTGCTCACATCTAGTAAAACATGGAGTATTTGTAAAGGTGCTTG
GTCTCCTCTATACTACAAGTATACATTGGAAGCATAAAGATCAAACCGTTG
GTTGCATAGGATGTCACCTTTATTTAACCCTAATACTCTGGTTGACCTAAT
CTTATTCTCAGACCTCAAGTGTCTGTGCAAGTATCTGTTCCATTTAAATATCAG
CTTTACAATTATGTGGTAGCCTACACACATAATCTCATTTCATCGCTGTAACC
ACCCTGTTGTGATAACCACTATTATTTTACCCATCGTACAGCTGAGGAAGCAA
ACAGATTAAGTAACTTGCCCAAACCAGTAAATAGCAGACCTCAGACTGCCAC
CCACTGTCCTTTTATAATAAATTTACAGCTATATTTTACTTTAAGCAATTCTT
TTATTCAAAAACCATTTATTAAGTGCCCTTGCAATATCAATCGCTGTGCCAGG
CATTGAATCTACAGATGTGAGCAAGACAAAGTACCTGTCCTCAAGGAGCTCA
TAGTATAATGAGGAGATTAACAAGAAAATGTATTATTACAATTTAGTCCAGT
GTCATAGCATAAGGATGATGCGAGGGGAAAACCCGAGCAGTGTTGCCAAGA
GGAGGAAATAGGCCAATGTGGTCTGGGACGGTTGGATATACTTAAACATCTT
AATAATCAGAGTAATTTTCATTTACAAAGAGAGGTCTGGTACTTAAATAACC
CTGAAAAATAACACTGGAATTCCTTTTCTAGCATTATATTTATTCCTGATTTC

FIG. 1A



CTTTGCCATATAATCTAATGCTTGTTTATATAGTGTCTGGTATTGTTTAAACAGT
TCTGTCTTTTCTATTTAAATGCCACTAAATTTTAAATTCATACCTTTCCATGAT
TCAAAAATTCAAAAGATCCCATGGGAGATGGTTGGAAAATCTCCACTTCATCC
TCCAAGCCATTCAAGTTTCCTTTCCAGAAGCAACTGCTACTGCCTTTTCATTCA
TATGTTCTTCTAAAGATAGTCTACATTTGGAAATGTATGTTAAAAGCACGTAT
TTTTAAAATTTTTTTCCTAAATAGTAACACATTGTATGTCTGCTGTGTACTTTG
CTATTTTTATTTATTTTAGTGTTCCTATATAGCAGATGGAATGAATTTGAAGT
TCCCAGGGCTGAGGATCCATGCCTTCTTTGTTTCTAAGTTATCTTTCCCATAGC
TTTTCAATTATCTTTCATATGATCCAGTATATGTTAAATATGTCCTACATATACA
TTTAGACAACCACCATTTGTTAAGTATTTGCTCTAGGACAGAGTTTGGATTG
TTTATGTTTGCTCAAAAGGAGACCCATGGGCTCTCCAGGGTGCCTGAGTCA
ATCTAGTCCTAAAAAGCAATCTTATTAACTCTGTATGACAGAATCATGTC
TGGAACCTTTTGTTTTCTGCTTCTGTCAAGTATAAACTTCACTTTGATGCTGTA
CTTGCAAAATCACATTTTCTTTCTGGAAATCCCGGCAGTGTACCTTGACTGCT
AGCTACCCTGTGCCAGAAAAGCCTCATTGTTGTGCTTGAACCCTTGAATGCC
ACCAGCTGTCATCACTACACAGCCCTCCTAAGAGGCTTCCTGGAGGTTTCGA
GATTCAGATGCCCTGGGAGATCCCAGAGTTTCTTTCCCTCTTGGCCATATTC
TGGTGTCAATGACAAGGAGTACCTTGGCTTTGCCACATGTCAAGGCTGAAGA
AACAGTGTCTCCAACAGAGCTCCTTGTGTTATCTGTTTGTACATGTGCATTTG
TACAGTAATTGGTGTGACAGTGTCTTTGTGTGAATTACAGGCAAGAATTGTG
GCTGAGCAAGGCACATAGTCTACTCAGTCTATTCCTAAGTCCTAACTCCTCCT
TGTGGTGTGGATTTGTAAGGCACTTTATCCCTTTTGTCTCATGTTTCATCGTA
AATGGCATAGGCAGAGATGATACCTAATTCTGCATTTGATTGTCACTTTTTGT
ACCTGCATTAATTTAATAAAAATATTCTTATTTATTTTGTACTTGGTAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIG. 1B



Signal peptide

1 MRIFAVFIEMTYWHLNNAFTVTPKDLVVEYGSNMTIECKFPVEKQLDL

*

Ig-V-like

51 AALIVYWEMEDKNI IQFVHGEEEDLKVQHSSYRQRARLLKDQLSLGNAALQ

101 ITDVKLQDAGVYRCMISYGGADYKRITVKVNAPYNKINQRIILVVDPVTSE

Ig-C-like

151 HELCQAEGYPKAEVIWTSDDHQVLSGKTTTNSKREEKLFNVTSTLRIN *

*

201 TTTNEIFYCTFRRDPREENHTAELVIPLEPLAHPNERTHLVLGAILLC TM

*

251 LGVALTFIFRLRKGRMDVKKCGIQDTNSKKQSDTHLEET

FIG. 2A



*

B7-H1 50 VEYGSNM^TIE^CKE^PVEKQ^LDLA^ALIVYWEM
B7-1 43 KEVATLSCGHNV^S-VEELAQTRIYWQK
B7-2 30 AYFNETADLP^CQFAN^SONQ^SLSELVFWQD

80 EDKNI^IQFVHGEED-LKVQ^HSS^YRQ^RARLL
68 EK^KMVLT^MMSGDMN----IWPE^YKNRT^IFD
60 QENLV^LNEV^YLGKE^KFDSV^HSK^YMGRT^SFD

*

89 KDQLSLG^NAALO^ITDVKLO^DAGV^YRC^MISY
95 IT----NNLSIV^LALR^PSD^EG^TYECVVLK
90 S-----DSW^TLRLHN^LOIKD^KGLYQ^CI^IHH

119 GGAD^YKR----ITV^KVNAPY^NKIN^ORILV^V
121 YEKDA^FKRE^HLAEV^TLSV^KAD^FPT^PSIS^DF
115 KKPTGMIR^IHOMNSE^LSVLAN^FSOPE^IVPI

*

145 DPVTSEHEL--TC-QAEGYPKA-EVIW^TSS
151 EIPTS^NIRR-II^CSTSG^GPEP-HLSWLEN
145 SNITENVYINLTCSSIHGYPEPKKMSVLLR

171 DHQ---VLSGKTTTNSKRE^EKLFNVTSTL
179 GE---ELNAINTTVSQDPE^TELYAVSSKL
175 TKNSTIEYDGI^MQK-SQDNVTELYDVSISL

*

198 RIN---TTNEI^FYCTFRRLDPEENHTAEL
205 DEN---MTTNH^SFMCLIKYGH^LRVN--QTF
204 SVSFPDVTSNMTIFCILETDKTRL^LS-SPE

226 VIPELPLAHPPNERT
230 NWNTTKQEH^FPDNLL
233 STELEDPOPPDHIP

FIG. 2B

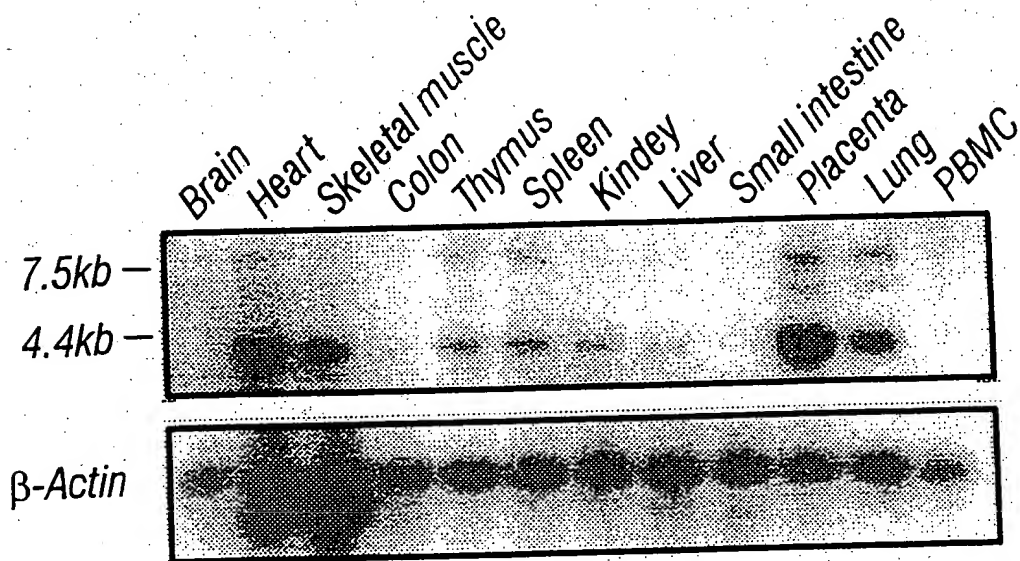


FIG. 3

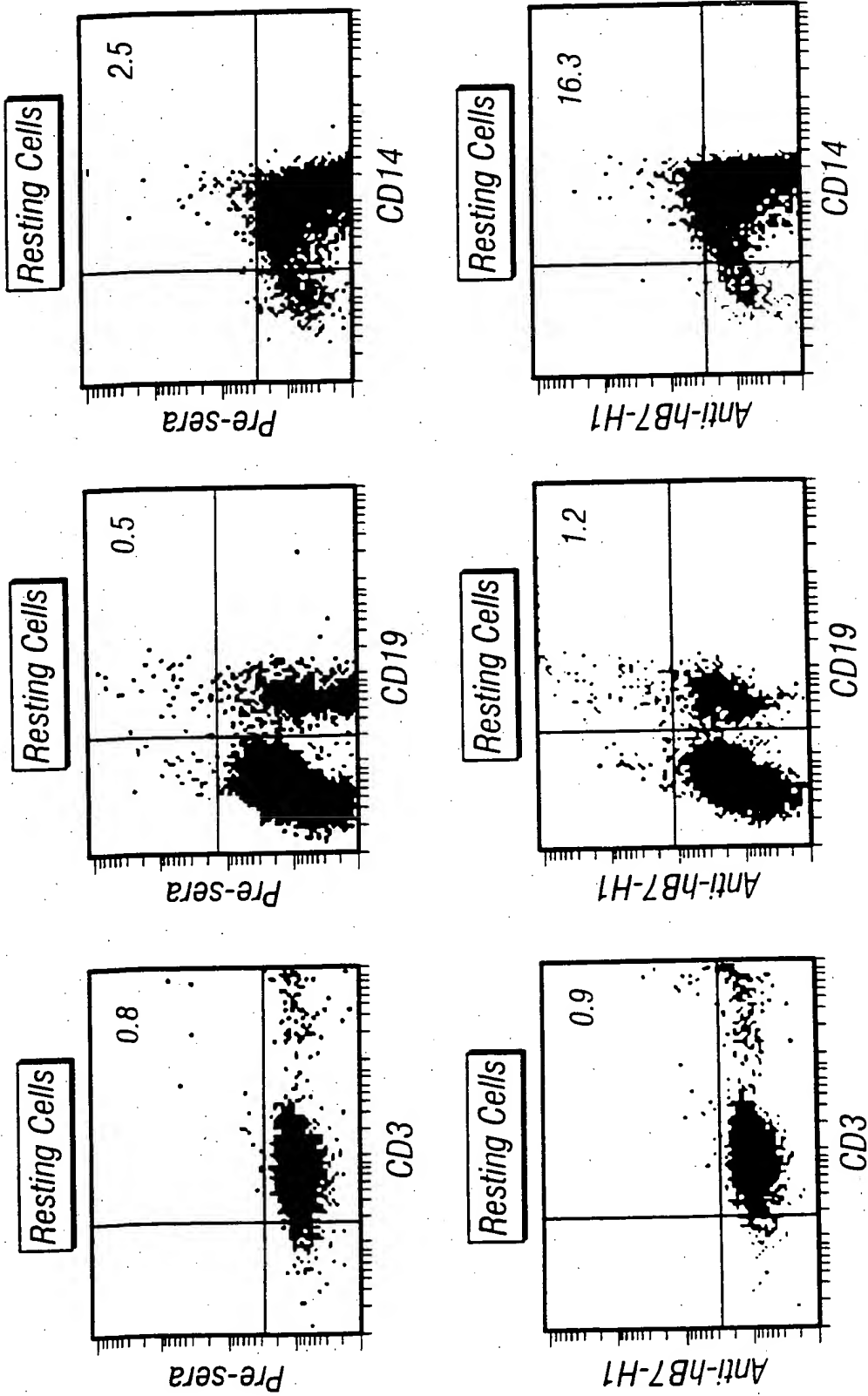


FIG. 4A

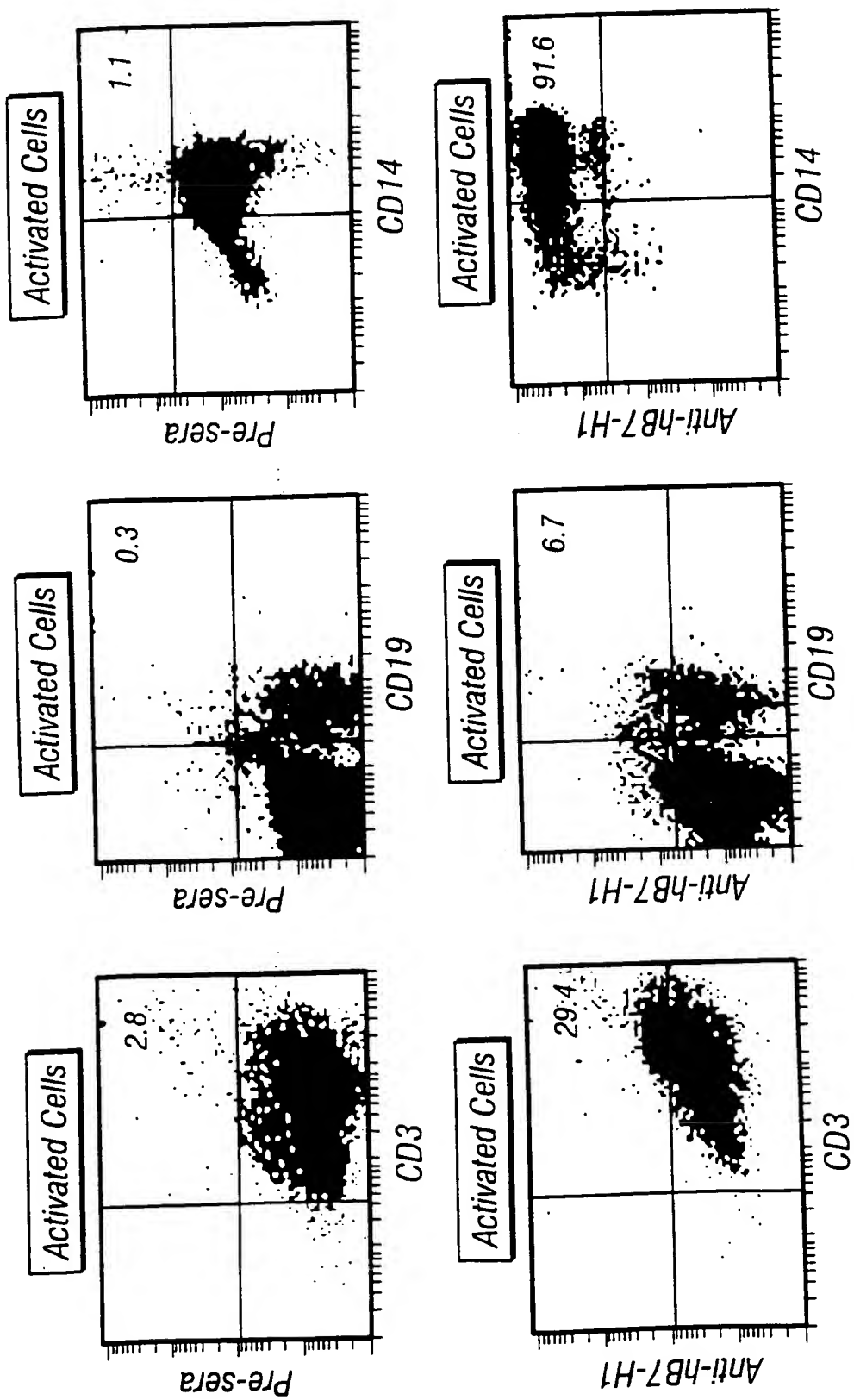


FIG. 4B

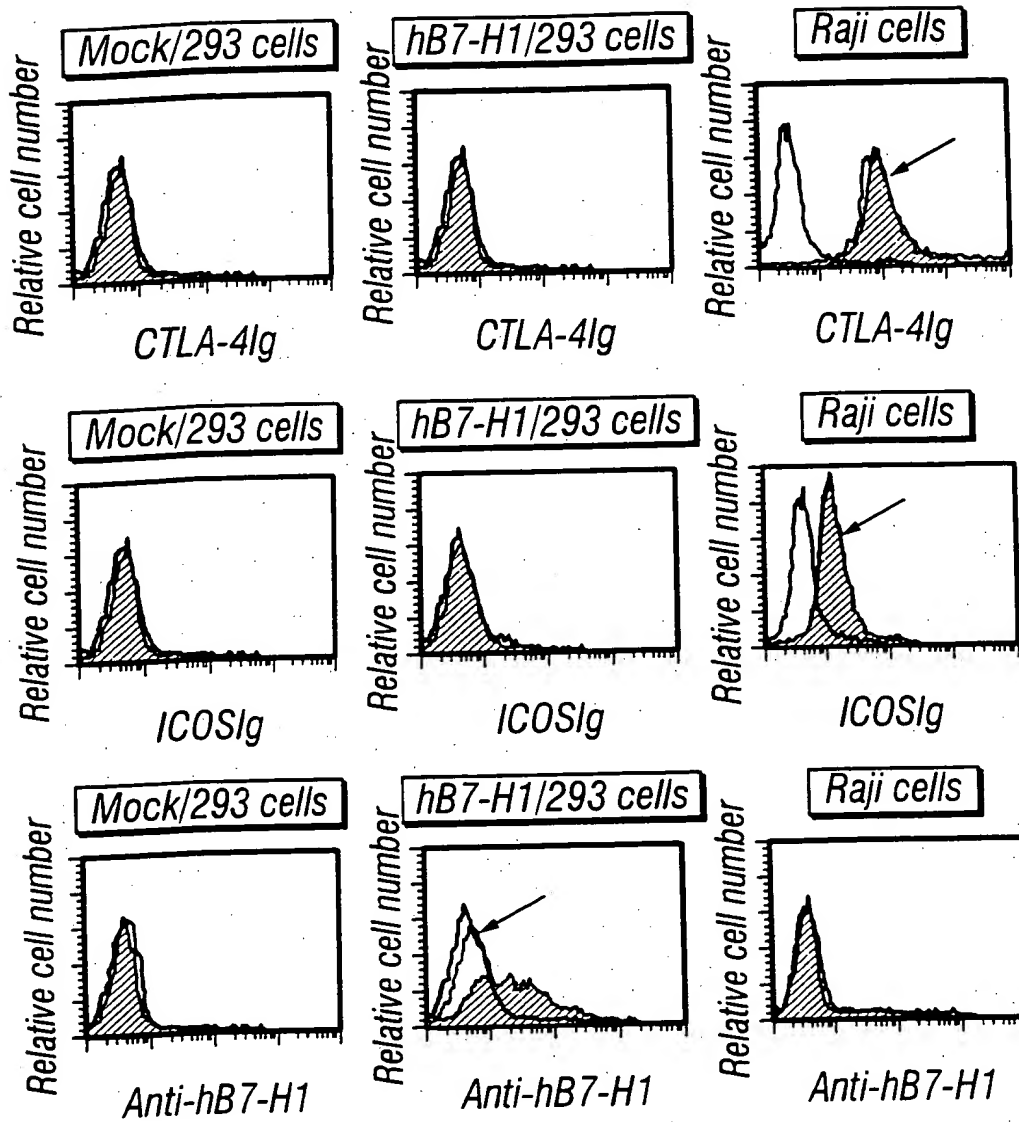


FIG. 5A

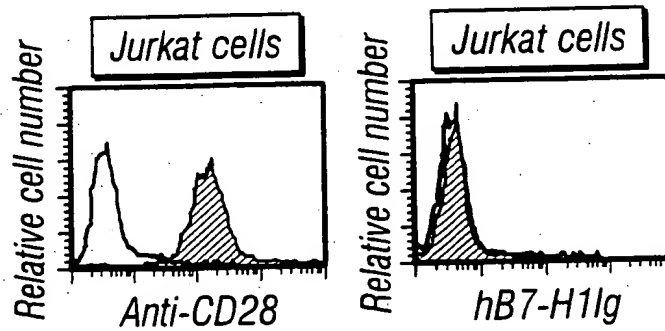


FIG. 5B

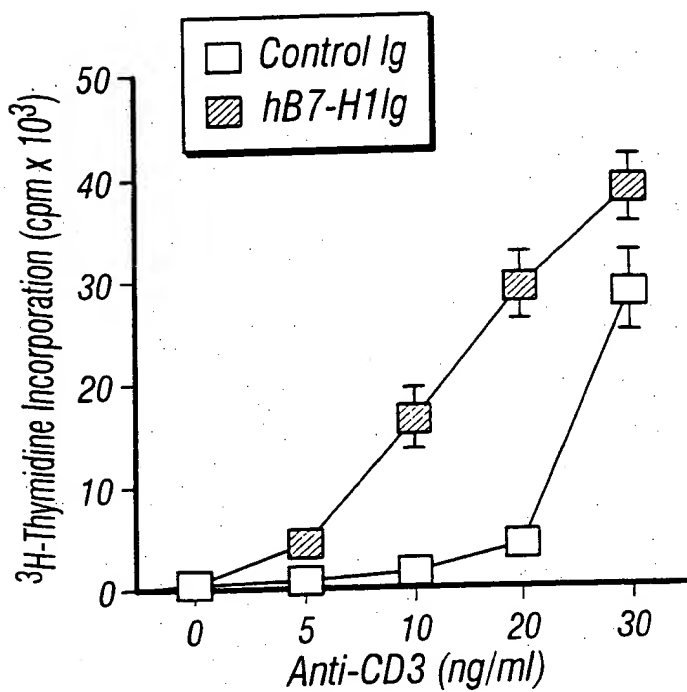


FIG. 6A

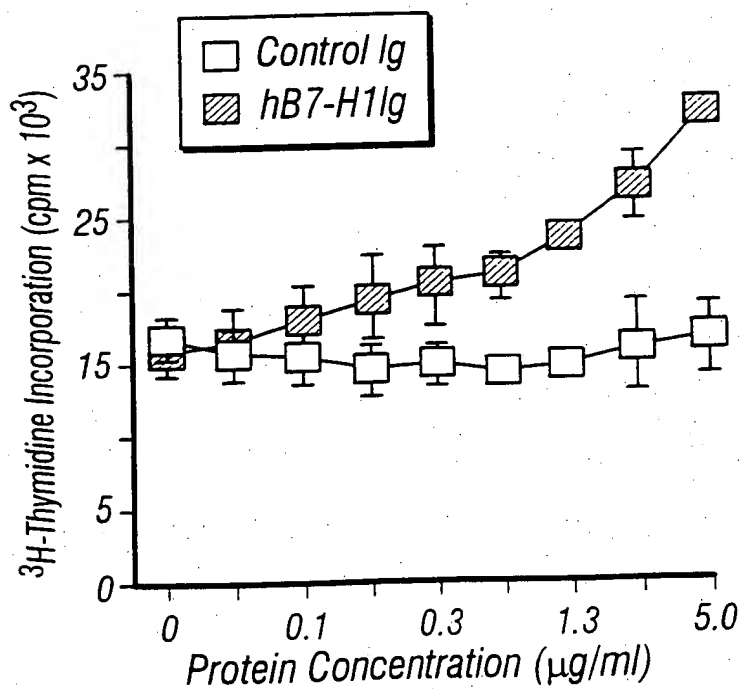
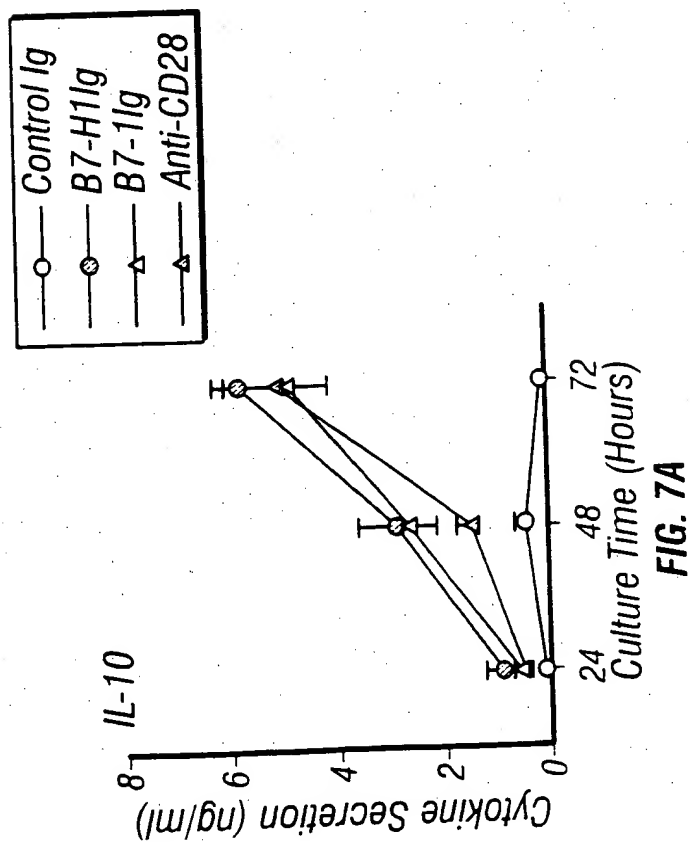
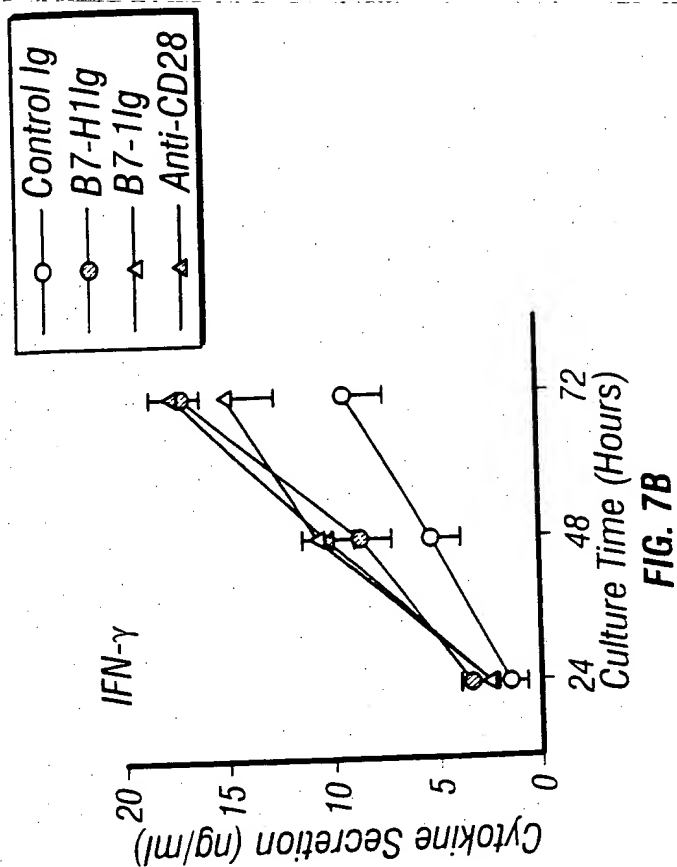


FIG. 6B



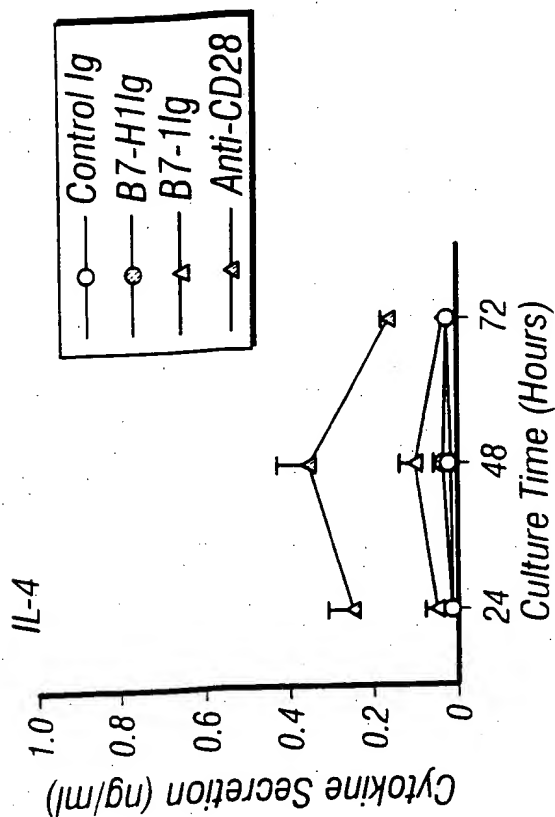


FIG. 7D

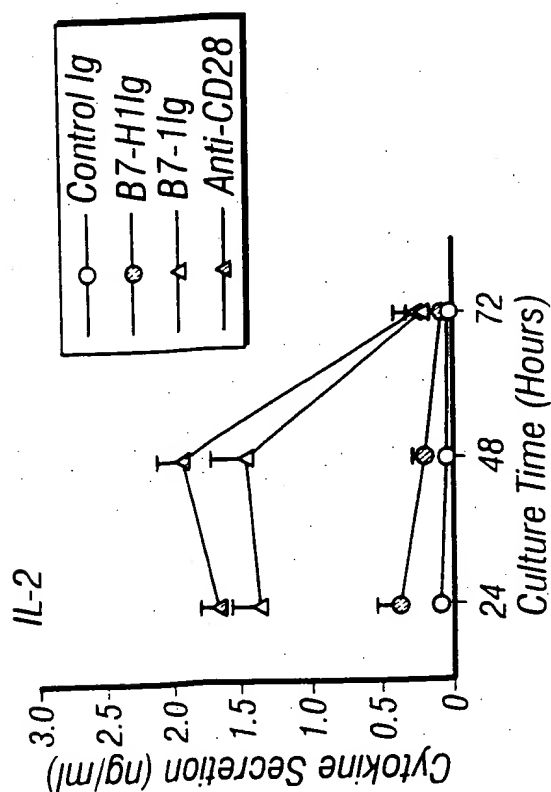


FIG. 7C

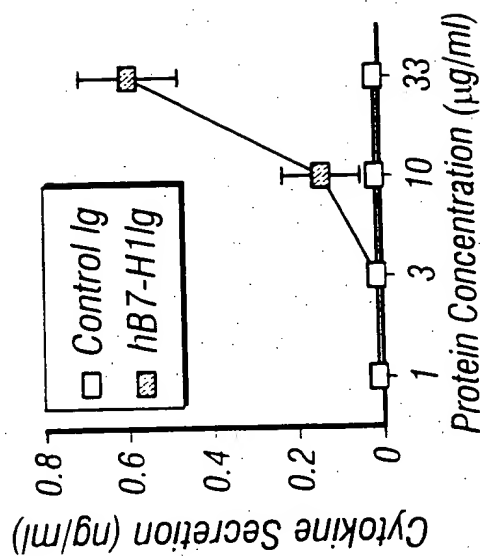


FIG. 7E

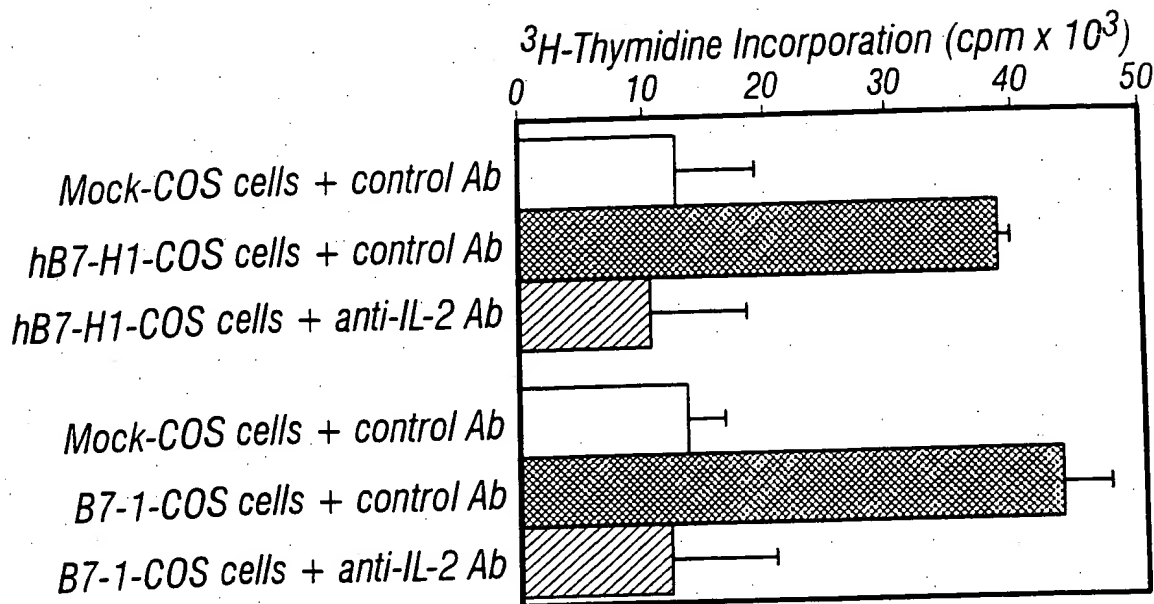


FIG. 8A

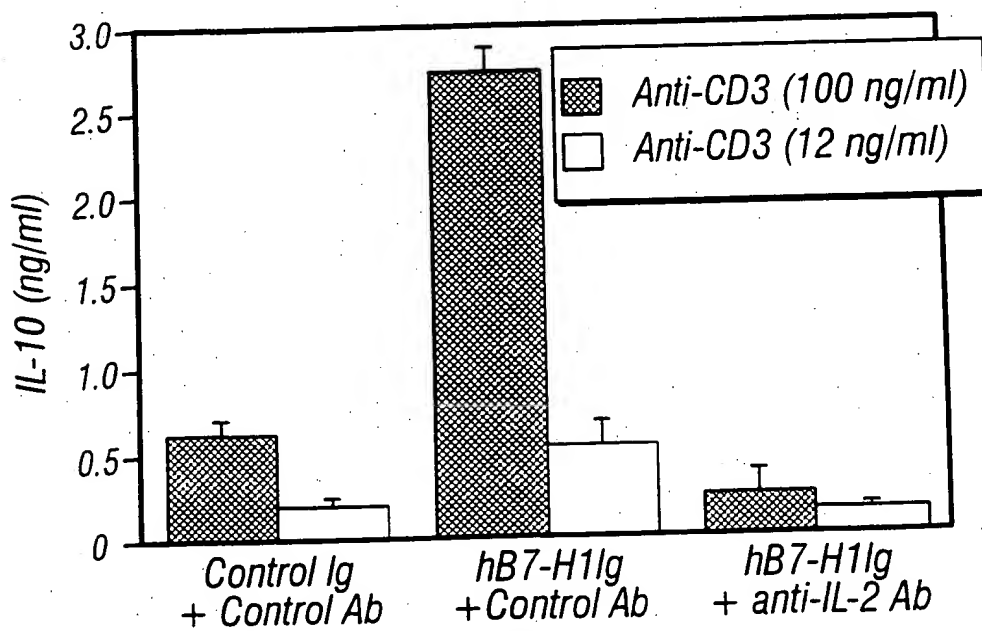


FIG. 8B

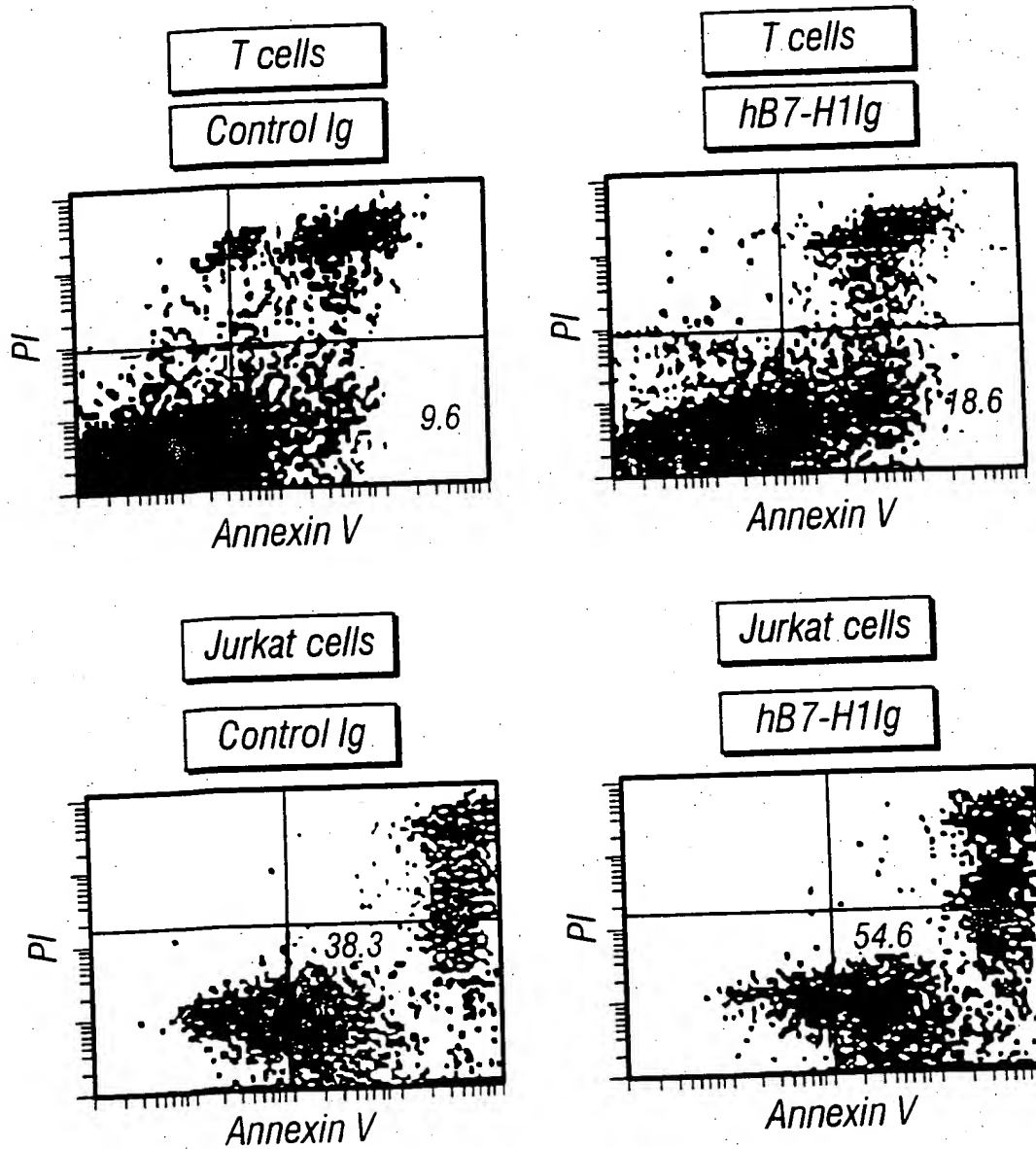


FIG. 9A

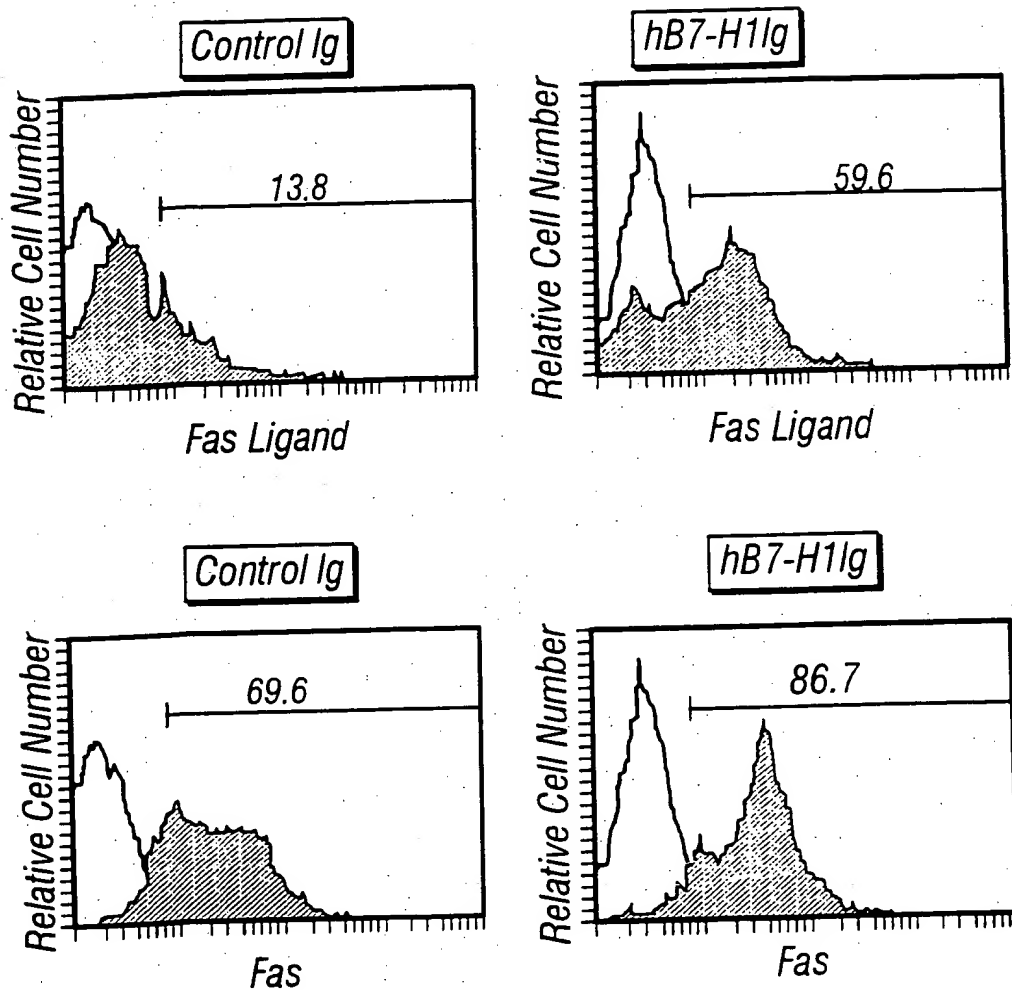


FIG. 9B



ATGAGGATATTTGCTGGCATTATATTCACAGCCTGCTGTCACTTGCTACGGGC
GTTTACTATCACGGCTCCAAAGGACTTGTACGTGGTGGAGTATGGCAGCAAC
GTCACGATGGAGTGCAGATTCCCTGTAGAACGGGAGCTGGACCTGCTTGCGT
TAGTGGTGTACTGGGAAAAGGAAGATGAGCAAGTGATTCACTTTGTGGCAGG
AGAGGAGGACCTTAAGCCTCAGCACAGCAACTTCAGGGGGAGAGCCTCGCT
GCCAAAGGACCAGCTTTTGAAGGGAAATGCTGCCCTTCAGATCACAGACGTC
AAGCTGCAGGACGCAGGCGTTTACTGCTGCATAATCAGCTACGGTGGTGCGG
ACTACAAGCGAATCACGCTGAAAGTCAATGCCCCATACCGCAAAATCAACCA
GAGAATTTCCGTGGATCCAGCCACTTCTGAGCATGAACTAATATGTCAGGCC
GAGGGTTATCCAGAAGCTGAGGTAATCTGGACAAACAGTGACCACCAACCCG
TGAGTGGAAGAGAAGTGTCACTTCCCGGACAGAGGGGATGCTTCTCAA
TGTGACCAGCAGTCTGAGGGTCAACGCCACAGCGAATGATGTTTTCTACTGT
ACGTTTTGGAGATCACAGCCAGGGCAAAACCACACAGCGGAGCTGATCATCC
CAGAACTGCCTGCAACACATCCTCCACAGAACAGGACTCACTGGGTGCTTCT
GGGATCCATCCTGTTGTTCTCATTGTAGTGTCCACGGTCCTCCTCTTCTTGAG
AAAACAAGTGAGAATGCTAGATGTGGAGAAATGTGGCGTTGAAGATACAAG
CTCAAAAACCGAAATGATACACAATTCGAGGAGACGTAA

FIG. 10

MRIFAGIIFTACCHLLRAFTITAPKDLVVEYGSNVTMECRFPVERELDLLALVV
YWEKEDEQVIQFVAGEEDLKPQHSNFRGRASLPKDQLLKNAALQITDVKLQDA
GVYCCIIISYGGADYKRITLKVNPYRKINQRISVDPATSEHELICQAEGYPEAEVI
WTNSDHQPVSGKRSVTTSRTEGMLLNVTSSLRVNATANDVFYCTFWRSQPGQN
HTAELIPELPATHPPQNRTHWVLLGSILLFLIVVSTVLLFLRKQVRMLDVEKCGV
EDTSSKNRNDTQFEET

FIG. 11

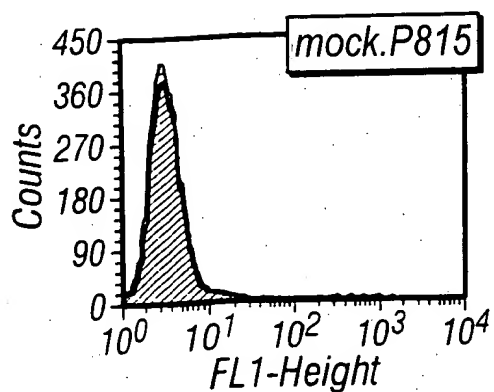


FIG. 12A

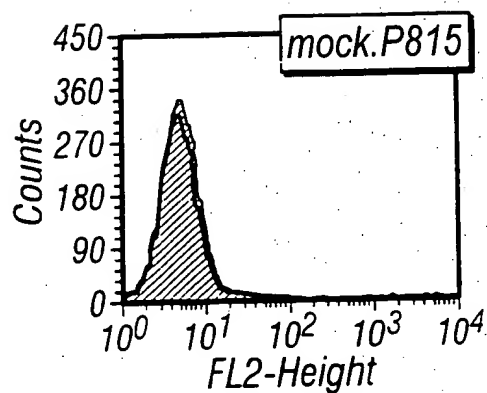


FIG. 12B

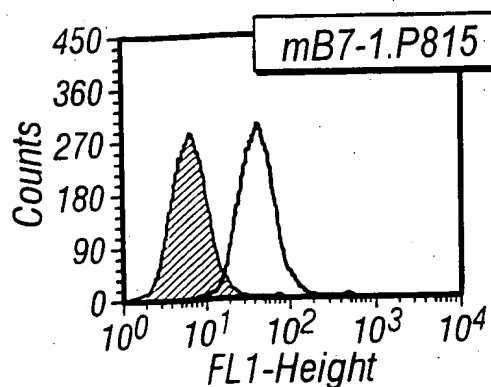


FIG. 13A

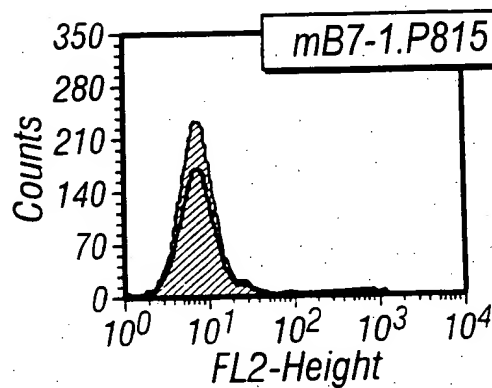


FIG. 13B

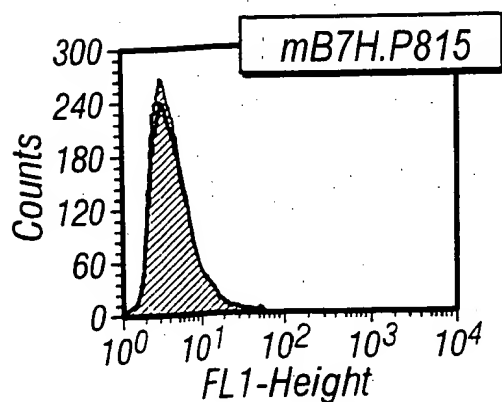


FIG. 14A

anti-mB7-1-FITC →

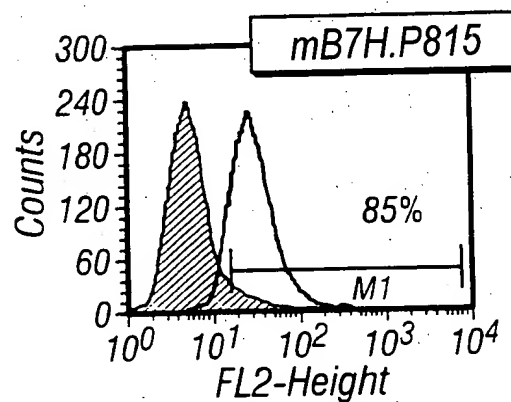


FIG. 14B

anti-mB7H/PE →

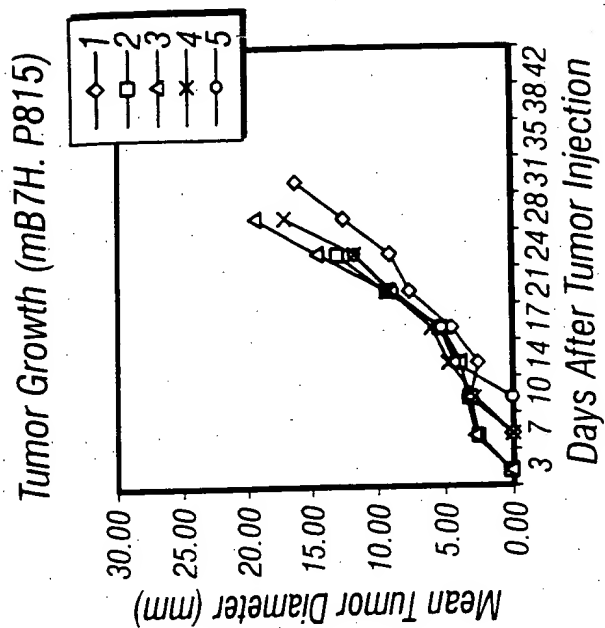


FIG. 15B

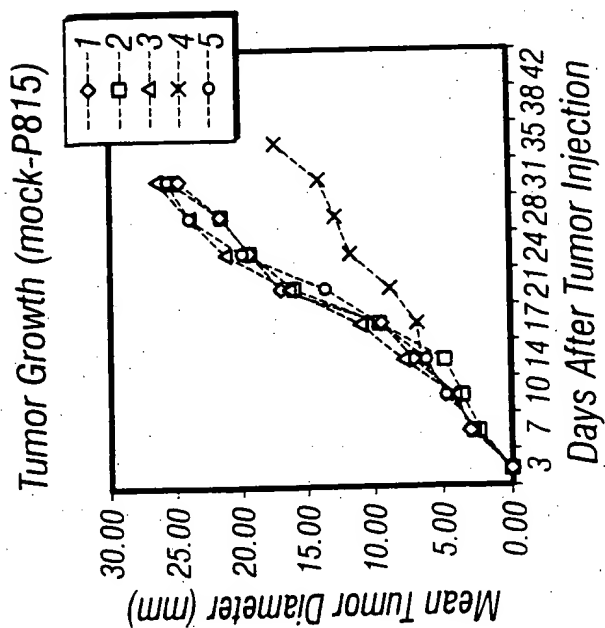


FIG. 15A